

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re: the application of:

Carl Woods

Application No.: 10/817,620

Filed: April 1, 2004

For: SUBSTRATE MENISCUS  
INTERFACE AND METHODS  
FOR OPERATION

Group Art Unit: 1746

Examiner: Unassigned

Atty. Docket No. LAM2P474

Date: July 17, 2006

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on July 17, 2006.

Signed: \_\_\_\_\_

Sylvia Castillo

INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

The references listed in the attached PTO Form 1449, (the copies of references which are not U.S. Patents have been attached), may be material to examination of the above-identified patent application. Applicants submit these references in compliance with their duty of disclosure pursuant to 37 CFR §§ 1.56 and 1.97. The Examiner is requested to consider these references and to acknowledge such consideration by initialing the appropriate location on the attached PTO Form 1449.

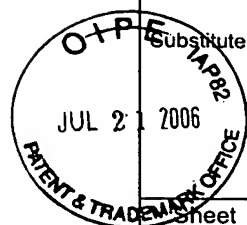
This Information Disclosure Statement (IDS) is not to be construed as a representation that a search has been made, that additional information material to the examination of this application does not exist, or that these references indeed constitute prior art.

This IDS is believed to be filed before the mailing date of a first Office Action on the merits. Accordingly, it is believed that no fees are due in connection with the filing of this IDS. However, if it is determined that any fees are due, then the Commissioner is hereby authorized to charge such fees to Deposit Account 50-0805 (Order No. LAM2P474)

Respectfully submitted,  
MARTINE PENILLA & GENCARELLA, LLP

Albert S. Penilla, Esq.  
Reg. No. 39,487

710 Lakeway Drive, Suite 200  
Sunnyvale, CA 94085  
Telephone: (408) 774-6903  
Customer Number 25920



Substitute for form 1449/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

1

of

5

**Complete if Known**

Application Number	10/817,620
Filing Date	April 1, 2004
First Named Inventor	Carl Woods
Art Unit	1746
Examiner Name	Unassigned
Attorney Docket Number	LAM2P474

**U.S. Patent Documents**

Examiner Initials	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	A	2003/0091754	05/15/03	Chihani et al.	
	B	2003/0092264	05/15/03	Shinji et al.	
	C	2004/0060573	04/01/04	Woods	
	D	2004/0069319	04/15/04	Boyd et al.	
	E	2004/0069329	04/15/04	De Larios et al.	
	F	2004/0136494	07/15/04	Lof et al.	
	G	2004/0178060	09/16/04	Ravkin et al.	
	H	2004/0182422	09/23/04	Boyd et al.	
	I	2005/0132515	12/18/03	Boyd et al.	
	J	2005/0139318	06/30/05	Woods et al.	
	K	2005/0145265	07/07/05	Ravkin et al.	
	L	2005/0145267	04/01/04	Korolik et al.	
	M	2005/0145268	04/01/04	Woods	

**Foreign Patent Documents**

Examiner Initial	Cite No. <sup>1</sup>	Foreign Patent Document No.	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number- <sup>4</sup> Kind Code <sup>5</sup> (if known)				
	N	EP 1 489 461 A1	12/22/04	ASML Netherland B.V.		<input type="checkbox"/>
	O	EP 1 489 462 A2	12/22/04	ASML Holding N.V.		<input type="checkbox"/>

**Non Patent Literature Documents**

Examiner Initial	Cite No.	Include name of author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
	P	OWA et al. "Immersion lithography; its potential performance and issues", Proceedings of the SPIE, SPIE, Bellingham, VA, US, Vol. 5040, No. 1, February 28, 2003, pages 724-733, XP002294500
	Q	LIM et al., "Atomic Layer deposition of transition metals", Department of Chemistry and Chemical Biology, Harvard University, Nature Publishing Group, Volume 2, November 2003, Pages 749-754

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language

Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(Use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/817,620
				Filing Date	April 1, 2004
				First Named Inventor	Carl Woods
				Art Unit	1746
				Examiner Name	Unassigned
Sheet	2	of	5	Attorney Docket Number	LAM2P474

### U.S. Patent Documents

Examiner Initials	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	A	2005/0148197	04/01/04	Woods et al.	
	B	2005/0217703	10/06/05	O'Donnell	
	C	2006/0064895	03/30/06	Garcia et al.	
	D	3,953,265	04/27/76	Hood	
	E	4,367,123	01/04/83	Beck	
	F	4,444,492	04/24/84	Lee	
	G	5,102,494	04/07/92	Harvey et al.	
	H	5,180,431	01/19/93	Sugimoto et al.	
	I	5,343,234	08/30/94	Kuehnle	
	J	5,361,449	11/08/94	Akimoto	
	K	5,472,502	12/05/95	Batchelder	
	L	5,558,111	09/24/96	Lofaro	
	M	5,601,655	02/11/97	Bok et al.	

### Foreign Patent Documents

Examiner Initial	Cite No. <sup>1</sup>	Foreign Patent Document No.	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number- <sup>4</sup> Kind Code <sup>5</sup> (if known)				
	N	JP05837190 (Patent Abstract in English provided)	03/04/53	Sonitsukusu:KK		<input type="checkbox"/>
	O	JP08277486 (Patent Abstract in English provided)	10/22/96	Dainippon Printing Co. Ltd.		<input type="checkbox"/>

### Non Patent Literature Documents

Examiner Initial	Cite No.	Include name of author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
	P	ICKnowledge LLC, "Technology Backgrounder: Atomic Layer Deposition", ICKnowledge.com, 2004, Pages 1-7
	Q	"Chemical vapor deposition", Wikipedia, the free encyclopedia, <a href="http://en.wikipedia.org/wiki/Chemical_vapor_deposition">http://en.wikipedia.org/wiki/Chemical_vapor_deposition</a> , 2005, Page 1-2

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language translation is attached.

Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(Use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/817,620
				Filing Date	April 1, 2004
				First Named Inventor	Carl Woods
				Art Unit	1746
				Examiner Name	Unassigned
Sheet	3	of	5	Attorney Docket Number	LAM2P474

### U.S. Patent Documents

Examiner Initials	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	A	5,709,757	01/20/98	Hatano et al.	
	B	5,830,334	11/03/98	Kobayashi	
	C	5,882,433	03/16/99	Ueno	
	D	5,893,004	04/06/99	Yamamura	
	E	5,975,098	11/02/99	Yoshitani et al.	
	F	5,989,478	11/23/99	Ouellette et al.	
	G	6,086,454	07/11/00	Watanabe et al.	
	H	6,092,937	07/25/00	Snodgrass et al.	
	I	6,103,636	08/15/00	Zahorik et al.	
	J	6,108,932	08/29/00	Chai	
	K	6,132,586	10/17/00	Adams et al.	
	L	6,214,513	04/10/01	Cai et al.	

### Foreign Patent Documents

Examiner Initial	Cite No. <sup>1</sup>	Foreign Patent Document No.	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number- <sup>4</sup> Kind Code <sup>5</sup> (if known)				
	M	JP11031672 (Patent Abstract in English provided)	02/02/99	Hitachi Ltd.		<input type="checkbox"/>
	N	JP62150828 A (Patent Abstract in English provided)	07/04/87	Mitsubishi Corporation		<input type="checkbox"/>

### Non Patent Literature Documents

Examiner Initial	Cite No.	Include name of author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
	O	SIGMA-ALDRICH, "Atomic Layer Deposition (ALD)", <a href="http://www.sigmaaldrich.com/Area_of_Interest/Chemistry/Materials_Science/Thin_Films">http://www.sigmaaldrich.com/Area_of_Interest/Chemistry/Materials_Science/Thin_Films</a> , 2005, Pages 1-2
	P	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language translation is attached.

Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(Use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/817,620
				Filing Date	April 1, 2004
				First Named Inventor	Carl Woods
				Art Unit	1746
Examiner Name	Unassigned				
Sheet	4	of	5	Attorney Docket Number	LAM2P474

### U.S. Patent Documents

Examiner Initials	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	A	6,230,722	05/15/01	Mitsumori et al.	
	B	6,417,117	07/09/02	Davis	
	C	6,433,541	08/13/02	Lehman et al.	
	D	6,474,786	11/05/02	Percin et al.	
	E	6,488,040	12/03/02	De Larios et al.	
	F	6,495,005	12/17/02	Colgan et al.	
	G	6,530,823	03/11/03	Goodarz et al.	
	H	6,531,206	03/11/03	Johnston et al.	
	I	6,550,988	04/22/03	Sugimoto et al.	
	J	6,555,017	04/29/03	Rushford et al.	
	K	6,616,772	09/09/03	De Larios et al.	
	L	6,689,323	02/10/04	Fisher et al.	
	M	6,764,720	07/20/04	Pui et al.	

### Foreign Patent Documents

Examiner Initial	Cite No. <sup>1</sup>	Foreign Patent Document No.	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number- <sup>4</sup> Kind Code <sup>5</sup> (if known)				
	N	WO 02/101795 A3	12/19/02	Verteq, Inc.		<input type="checkbox"/>
	O	WO 02/032825 A1	04/25/02	The Regents of the University of California		<input type="checkbox"/>

### Non Patent Literature Documents

Examiner Initial	Cite No.	Include name of author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
	P	
	Q	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language translation is attached.

Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(Use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/817,620
				Filing Date	April 1, 2004
				First Named Inventor	Carl Woods
				Art Unit	1746
				Examiner Name	Unassigned
Sheet	5	of	5	Attorney Docket Number	LAM2P474

### U.S. Patent Documents

Examiner Initials	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	A	6,799,584	10/05/04	Yogev et al.	
	B	6,854,473	02/15/05	Hanson et al.	
	C	6,954,993	10/18/05	Smith et al.	
	D	6,988,326	01/24/06	O'Donnell et al.	
	E	6,988,327	01/24/06	Garcia et al.	
	F	7,000,622	02/21/06	Woods et al.	
	G	7,069,937	07/04/06	Garcia et al.	
	H				
	I				
	J				
	K				
	L				
	M				

### Foreign Patent Documents

Examiner Initial	Cite No. <sup>1</sup>	Foreign Patent Document No.	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number- <sup>4</sup> Kind Code <sup>5</sup> (if known)				
	N	WO 03/014416 A2	02/20/03	Ebara Corporation		<input type="checkbox"/>
	O	WO 99/049504	09/30/99	Nippon Kogaku KK		<input type="checkbox"/>

### Non Patent Literature Documents

Examiner Initial	Cite No.	Include name of author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
	P	
	Q	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language translation is attached.